News and Views from the Literature

Pediatric Urology

The Risk of Retractile Testes Becoming Ascending Testes

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The estimated incidence of orchiopexies by 14 to 17 years of age is 2% to 3%. This is inconsistent with the reported incidence of undescended testes (only 0.8%) by the end of the first year of life. A bimodal distribution for age at orchiopexy has been reported by Fenton and colleagues[1] and Hack and colleagues,[2] showing peaks at 2 years and 10 to 11 years, with an overall mean age of 6.6 years. Therefore, the acquired undescended testis or ascending testis in boys with a previously documented scrotal testis might explain why older boys undergo orchiopexy. This phenomenon might be due to a hyperactive cremasteric reflex, incomplete absorption of the patent processus vaginalis in boys with retractile testis, fibrous adhesions to the spermatic cord after inguinal surgery, and misdiagnosis due to an inaccurate physical examination. Prior inguinal surgery and a hyperactive cremasteric reflex are not frequently observed; thus misdiagnosis has previously been the explanation for the ascending testis.

Historically, a retractile testis has been thought to be a variant of the normal testis. We explain to parents that the testis has the ability to move spontaneously out and back into the scrotum, with or without manual manipulation. Retractile testes remain intrascrotal for a finite period. These retractile testes are usually thought to descend completely at the time of puberty, and there are no implications for infertility.

Low-lying undescended testes that have not completely descended or ectopic testes might be diagnosed as retractile testes. Wyllie[3] has proposed criteria to differentiate an incompletely descended testis from a retractile testis: (1) incompletely descended testes are smaller than the contralateral gonad, (2) the testis rapidly retracts out of the scrotum when the testis is released, and (3) pain is elicited when the testis is manipulated into the scrotum. These low-lying or ectopic testes are undescended and are more accurately diagnosed with increasing somatic growth. In addition, boys with a descended or possibly retractile testis who are later found to have an undescended testis due to the ascent of the testis are thought to have a fibrous persistence of the processus vaginalis, which limits the growth of the spermatic cord.

Agarwal and colleagues from Rainbow Babies and Children's Hospital (Cleveland, OH) have presented results from the first longitudinal study of retractile testes in the United States. The study is important because these investigators show that the retractile testis has a significant risk (32%) of becoming an ascending or an acquired undescended testis. The findings underscore the importance of regular long-term follow-up examinations in these boys.

Retractile Testis—Is It Really a Normal Variant?

Agarwal PK, Diaz M, Elder JS.

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The investigators examined 204 retractile testes (40 unilateral, 82 bilateral) in 122 boys. A retractile testis was defined as a testis above the scrotum that could be manipulated easily into the scrotum and remain there without traction until the cremasteric reflex was induced. Most boys were followed annually, except in cases with an undescended testis and contralateral retractile testis. A scrotal orchiopexy was performed on the retractile testis to avoid the need for long-term follow-up and to prevent future ascending testes. All boys in this study had a minimum follow-up of 1 year. Of the 204 retractile testes, 61 (30%) descended (mean age, 6.6 years), 66 (32%) became undescended, and 77 (38%) remained retractile. Of the 62 retractile testes with an inelastic spermatic cord, 35 (56%) became undescended. A processus vaginalis was found in 8 of 61 orchiopexies (13%). A fibrous remnant of the processus vaginalis was found in the majority of the patients.

In boys 7 years or older, the testis had a 19% chance of remaining retractile, compared with a 44% chance in boys younger than 7.

Agarwal and colleagues found that a retractile testis would more likely descend in a boy older than 7 years than in a boy younger than 7. In boys 7 years or older, the testis had a 19% chance of remaining retractile, compared with a 44% chance in boys younger than 7. If a boy had 1 retractile testis and 1 descended testis at the start of the study, then 69% of the retractile testes descended, and only 32% required an orchiopexy. On the other hand, those with 1 retractile testis and 1 undescended testis at the start of the study had a greater likelihood of the retractile testis requiring an orchiopexy for the undescended testis.

This study is important because it demonstrates that the retractile testis is not a normal variant; it has a significant risk of undergoing ascent and residing outside of the scrotum. These findings highlight the need for long-term follow-up in boys with retractile testes, given that 32% of these retractile testes become ascending testes. The risk is greater in boys younger than 7 years and in those with an inelastic spermatic cord. ■

References

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Prostate Cancer

Conflicting Insights Into the Role of Watchful Waiting in the Management of Adenocarcinoma of the Prostate

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Approximately 20% to 30% of men undergoing prostate-specific antigen (PSA) testing in referral and screened populations will have well- to moderately differentiated (Gleason score ≤ 6) and small volume (< 0.5 cm^3) tumors. These tumors are thought to be less significant than larger, higher-grade tumors and demonstrate a long natural history.[1-3] Expectant management of prostate cancer is based on the assumption that therapy (as well as potential complications) in these patients can be deferred without adverse consequence until it is no longer necessary (patient becomes old enough that prostate cancer is unlikely to be the cause of mortality) or until changes in the characteristics of the tumor warrant immediate treatment. Expectant management can be an active curative treatment approach if patients are treated aggressively upon follow-up determination of pathological progression.[2,4] The results of two important studies with differing conclusions regarding the expectant management of localized prostate cancer have recently been released.

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